



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

Town of Speedway Water Supply and Treatment Improvements State Revolving Fund Project # DW11 07 49 01

DATE: October 1, 2012

TARGET APPROVAL DATE: October 31, 2012

I. INTRODUCTION

The above entity has applied to the State Revolving (SRF) Fund Loan Program for a loan to finance all or part of the drinking water project described in the attached Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target approval date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent to:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: Water Supply and Treatment Improvements
Town of Speedway
1450 North Lynhurst Drive
Speedway, IN 46224

SRF Project Number DW11 07 49 01

Authorized Representative: Ms. Barbara Lawrence, Town Manager

II. PROJECT LOCATION AND BACKGROUND

The project area is located in Speedway, Wayne Township, Marion County, in the Clermont USGS quadrangle, T15N, R2E, section 1 (proposed replacement well #15), and T16N, R2E, section 36 (remainder of project). See Figure 1.

III. PROJECT NEED AND PURPOSE

Adding three wells would address the issue of declining well water production. The surface water intake improvements would address issues with the age and location of the screen on the water intake, as well as maintenance/access safety issues. The new raw water pump station will permit better hydraulics with the new water intake structure. The improvements at the surface water treatment plant will address compliance with regulations for surface water treatment plants (e.g., Long Term 2 Enhanced Surface Water Treatment Rule Bin 2 and Stage 2 Disinfectants and Disinfection Byproducts Rule) to reduce taste and odor issues; the improvements will also address replacement of equipment that has exceeded its useful life. At the ground water treatment plant, the project will address the need to replace aging infrastructure. The project will also address the need for adequate lighting and emergency backup power at the water treatment plant site.

IV. PROJECT DESCRIPTION (See figures 1 and 2)

The proposed project involves:

- Construction of two new wells to replace Wells 8 and 11 and construction of one additional well;
- Construction of a new surface water intake structure and a new raw water pump station;
- Addition of ultraviolet disinfection at the surface water treatment plant and modifications to the powdered activated carbon system, upgrade of the filters, replacement of the high service pumps and associated piping, replacement of the transfer pumps and valves, replacement of the raw water pumps' motors and controls, upgrade of the electrical system, and other miscellaneous improvements;

- Addition of a standby generator for use with both the surface and ground water treatment plants, and
- Improvements to lighting at the water treatment plants.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary:

DESCRIPTION	ESTIMATED COSTS
1. Wells	\$ 687,500
2. Raw Water Intake and Raw Water Pump Station	740,000
3. Treatment Process Improvements	1,275,000
4. Flocculation Drive Area Access and Cover	32,000
5. Flocculation and Sedimentation Basin Algae Control	25,000
6. Surface Water Treatment Plant Improvements	843,000
7. Ground Water Treatment Plant Improvements	370,000
8. Water Treatment Plant Site Lighting	<u>93,500</u>
Construction Sub-Total	\$4,066,000
Contingency	<u>406,600</u>
Construction Total	<u>\$4,472,600</u>
Non-Construction Total	\$1,163,400
Total Estimated Project Cost	\$5,636,000

- B. Speedway will finance the project through a future 20-year SRF loan at a fixed interest rate to be determined at the loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

The town evaluated the no-action alternative and rejected it, since the deficiencies listed above would continue and would not be corrected. The town examined alternatives among process and equipment improvements at the treatment plant and intake. Project items listed above were chosen based on cost-effectiveness, fit with the current plant and ease of implementation.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed / Undisturbed Land: Undisturbed/Disturbed Land: Construction will occur in areas previously disturbed by construction activity.

Structural Resources (figures 3a and 3b): Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's

finding pursuant to Section 106 of the National Historic Preservation Act is: “no historic properties affected.”

Wetlands: Eagle Creek is a lacustrine wetland above the low-head dam, and a riverine wetland below the dam. The new water intake will be constructed on the north bank of Eagle Creek approximately 200 feet above the low-head dam. New well construction will have temporary impacts on Eagle Creek, such as siltation, which the town will mitigate as much as possible. The town will coordinate with the U.S. Army Corps of Engineers and the Indiana Department of Environmental Management’s Water Quality Certification Section and will obtain the appropriate permits. Mitigation measures to lessen and compensate for wetland impacts in comments letters from the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the Indiana Department of Natural Resources will be implemented.

Surface Waters: The project will not adversely affect waters of high quality listed in 327 IAC 2-1-1.3-3, exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-2, Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3), or waters on the Outstanding Rivers list. The town will acquire permits for intake construction from the Indiana Department of Natural Resources and the U.S. Army Corps of Engineers.

Floodplain (Figure 1): The portions of the project associated with replacement wells 8 and 11 and with the surface water intake are located in the 100-year floodplain. The wells will be constructed so that the top of the well casing, motor and electrical components are located at least three feet above the 100-year flood elevation. The town will acquire a construction in a floodway permit will be obtained from the Indiana Department of Natural Resources, along with other necessary permits for the well and water intake construction.

Groundwater: The project will not adversely affect local wells or the water table. The construction of the water intake structure may require dewatering during excavation, but the local groundwater table will be restored to normal levels following construction. During well pump performance testing, groundwater would be pumped from the new wells for a minimum of 24 hours. No private wells would be affected by the well testing, and the affect on the water table would be temporary.

Plants and Animals: Tree removal should be minimal. The construction and operation of the project will not negatively impact state or federal-listed endangered species or their habitat. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources and U.S. Fish and Wildlife Service will be implemented.

Prime Farmland: The project will not cause a conversion of prime farmland.

Air Quality: Construction of the project will result in increased fumes and noise in the vicinity of the project during the length of the proposed construction period. No direct long-term air quality impacts are expected.

Open Space and Recreational Opportunities: The project will neither create nor destroy any open space and recreation opportunities.

Lake Michigan Coastal Program: The project is not within the Lake Michigan Coastal area.

National Natural Landmarks: Construction and operation of the proposed project will not impact National Natural Landmarks.

B. Indirect Impacts

The town's Preliminary Engineering Report (PER) states: *The Town of Speedway, through the authority of its Council, planning commission, or other means, will ensure that future development, as well as future supply, storage, distribution or treatment works projects connecting to SRF-funded facilities, will not adversely impact wetlands, forested areas, steep slopes, 100-year floodplains, archaeological/historical/structural resources, or other sensitive environmental resources. The Town will require such new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

The SRF requested comments from the Indiana Department of Natural Resources (IDNR), Division of Historic Preservation and Archaeology (DHPA) in May, 2012, and the DHPA responded on June 15: *Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated and received by the Indiana SHPO on June 15, 2012, for the above indicated project in Speedway, Wayne Township, Marion County, Indiana.*

Based on our analysis, it has been determined that no historic structures will be altered, demolished, or removed by the proposed project.

After the DHPA and other environmental review authorities were contacted for comment, the town changed the location of the proposed intake from the middle of Eagle Creek to the north bank, approximately 200 feet upstream of the existing intake, which is just above the low-head dam, and SRF again asked the DHPA for comment. In correspondence dated June 28, 2012, the DHPA stated: *As was stated previously, based on our analysis, it has been determined that no historic structures will be altered, demolished, or removed by the proposed project.*

In regard to archaeology, we note that the two proposed well locations within Meadowood Park (Figure 3, Stillwell, 5/24/12) are not part of the current undertaking. Therefore, it has been determined that no currently known archaeological resources will be altered, demolished, or removed by the proposed project. This analysis is subject to the following condition:

- *The project remains within previously disturbed areas.*

If any archaeological artifacts, features, or human remains are uncovered during construction, state law (Indiana Code 14-21-1-27 & 29) requires that the discovery must be reported to the Department of Natural Resources within two business days.

In correspondence dated May 30, 2012, commenting on the original project with a proposed intake in the middle of Eagle Creek, the U.S. Fish and Wildlife Service stated: *These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife's Mitigation Policy.*

The proposed project includes replacement of 2 wells, construction of a new well, improvements to the existing water treatment plant, and installation of a new passive water intake and screens with a floating access dock in Eagle Creek. A temporary cofferdam will be constructed for the intake pipe installation.

We do not anticipate impacts on fish and wildlife resources from the well installations or treatment plant improvements, all of which are on previously disturbed sites. The pipe installation and cofferdam will require disturbance within the stream channel at a previously undisturbed site. We recommend avoidance of stream channel disturbance at that site during the fish spawning season (April 1 – June 30). We also recommend enhancement of the riparian vegetation buffer along the levee site of Eagle Creek wherever possible.

Endangered Species

*The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalist*). We concur that the proposed project is not likely to adversely affect this listed species. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended.*

After being informed that the town had changed the proposed intake location from in-stream to the north bank, the USFWS, in an email dated June 5, 2012, stated: *If [Speedway] puts the intake on the north bank the stream impacts will be no greater, possibly less, in which case I will not have any additional comments. If they [place] it in the current location adjacent to the dam we won't need the fish spawning season restriction.* After seeing a graphic showing the location of the new intake, the USFWS stated in an email dated June 25, 2012: *...previous comments on the new site are still adequate.*

In correspondence dated April 21, 2011, the Natural Resources Conservation Service stated: *The proposed project to make waterworks improvements in the Town of Speedway, Marion County, Indiana...will not cause a conversion of prime farmland.*

In correspondence dated June 19, 2012, the IDNR Environmental Unit stated: *Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.*

Regulatory Assessment: This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1. Please submit a copy of this letter with the permit application.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: The following measures should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

- 1. Revegetate "low maintenance" areas with a mixture of native grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in "high maintenance" areas only.*
- 2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.*
- 3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.*
- 4. Minimize the movement of resuspended bottom sediment from the immediate project area.*

5. *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
6. *Plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.*

VIII. MITIGATION MEASURES

1. Any land grading and excavating will be kept to a minimum in order to reduce erosion and sediment transport.
2. Appropriate structural (i.e., sediment traps, staked hay bales, rip rap, silt fencing) or agronomic (i.e. seeding, fertilizing, mulching, liming) practices will be used to control runoff and sedimentation during and after construction.
3. Surface and subsurface drainage patterns will be restored as early as possible.
4. Construction entrances, roadways, and staging areas will be stabilized prior to construction by means of stone pads or paving.
5. Construction activities will be scheduled to avoid excessive wet conditions.
6. Topsoil will be stockpiled separately for use as top-dressing for site restoration.
7. Excess excavated materials will be used on other parts of the project construction were feasible.
8. Groundwater discharges will be aerated prior to diversion to storm sewers or surface water to reduce the iron and/or manganese content.
9. If significant cultural resources are encountered during construction, all activities will be ceased until the resource can be studied, protected or recovered.
10. Mitigation measures typically cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service, will be implemented.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on July 11, 2011, at 7:00 pm at the Speedway Town Hall to discuss the town's PER. Some comments about the project were raised at the public hearing and addressed by the project engineer. No written comments were submitted in the five-day period following the public hearing.



FIGURE 1: Project Elements & 100-Year Floodplain



Town of Speedway Water Works
5700 West 10th Street
Speedway, Indiana 46224

Speedway Water Works Improvements

Location: Speedway
Township: Wayne
County: Marion
State: Indiana

Date: 06/15/2011
Revision 4 Date: 09/27/2012

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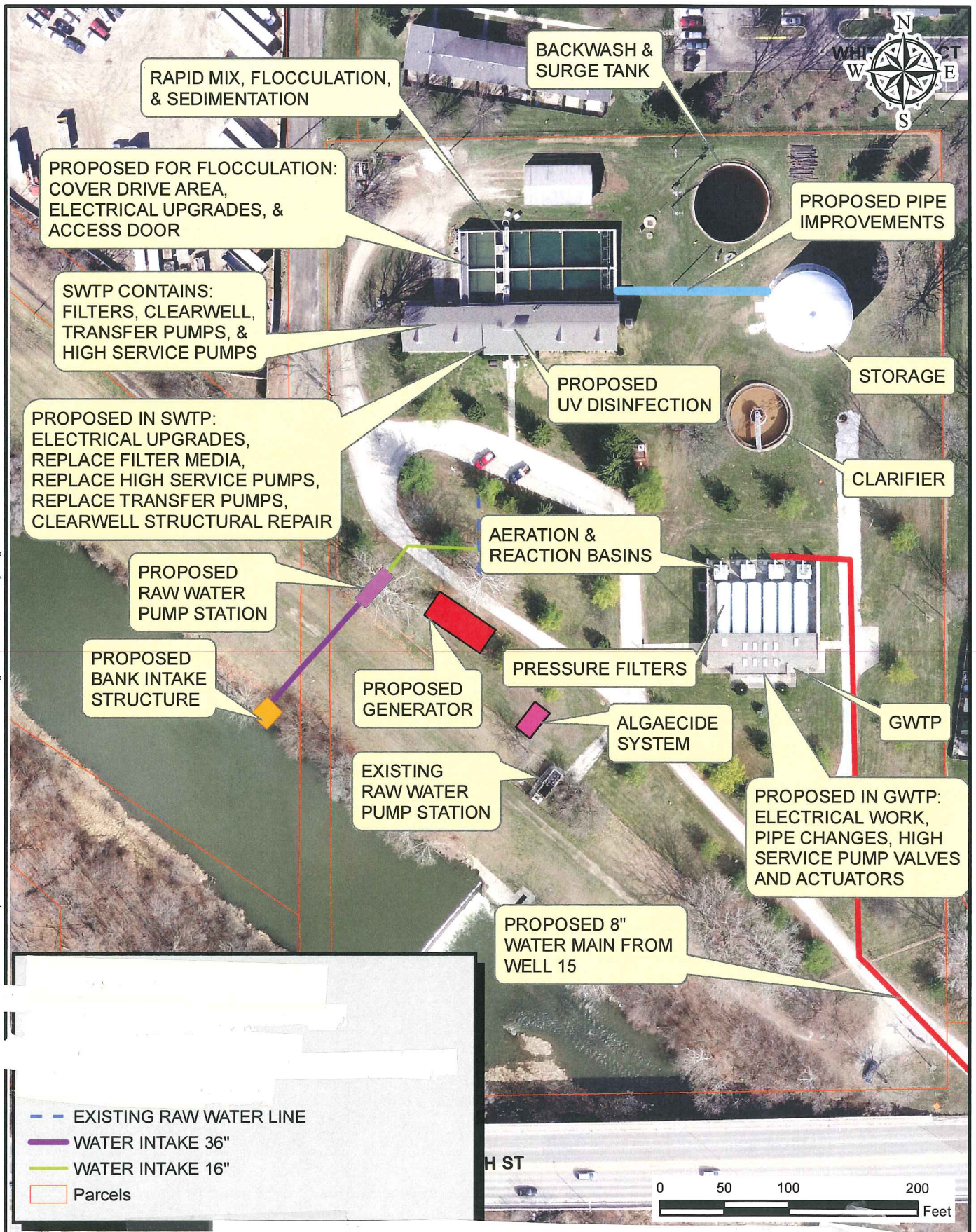
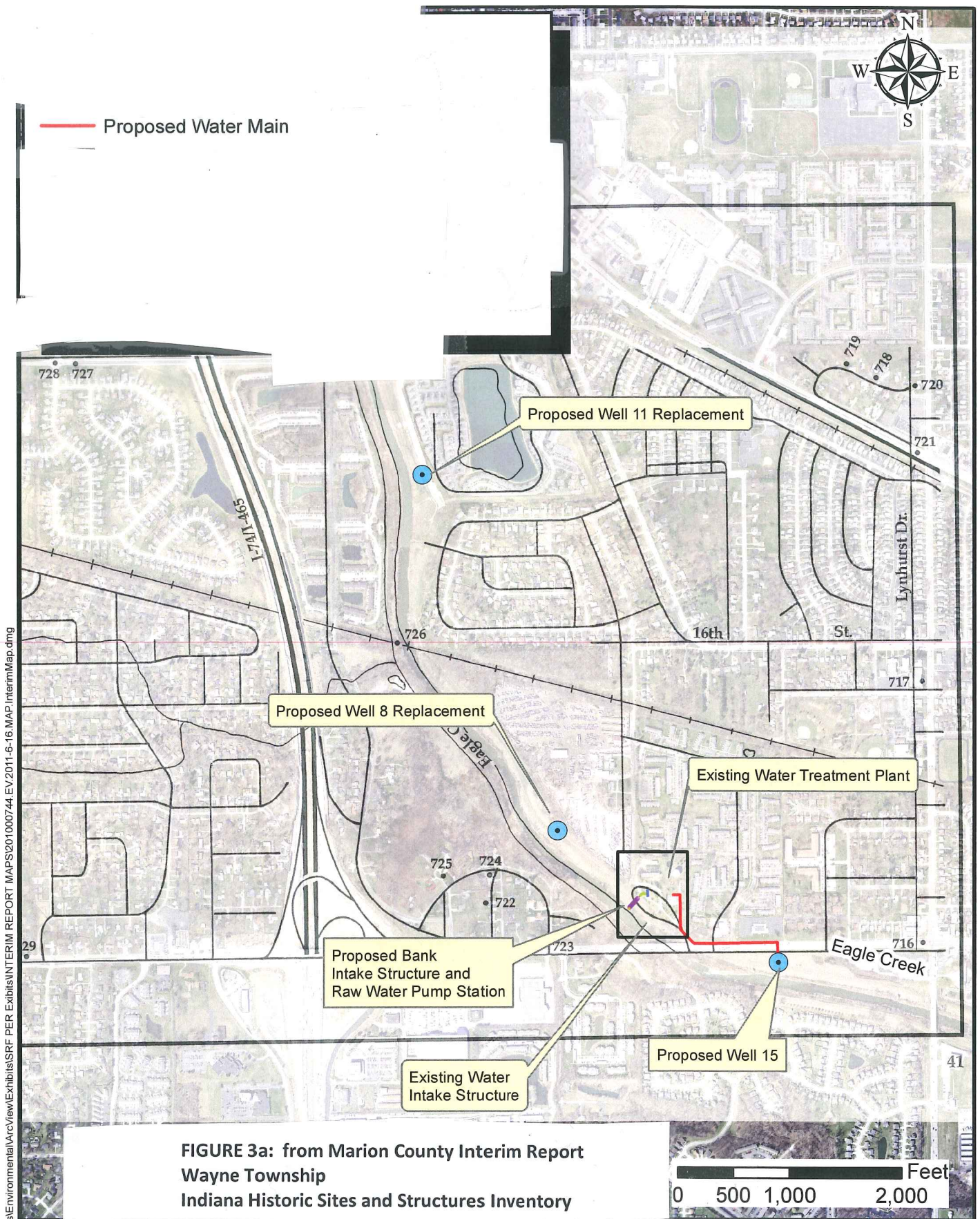


FIGURE 2: Proposed Projects Elements at and near the Surface Water and Ground Water Treatment Plants.



Town of Speedway Water Works
5700 West 10th Street
Speedway, Indiana 46224

Date: 05/21/2012
Revision 4 Date: 09/27/2012



**FIGURE 3a: from Marion County Interim Report
Wayne Township
Indiana Historic Sites and Structures Inventory**

**Wayne Township Interim Map #13
Sites # 55716-55729**

Town of Speedway Water Works
5700 West 10th Street
Speedway, Indiana 46224

Speedway Water Works Improvements

Location: Speedway
Township: Wayne
County: Marion
State: Indiana

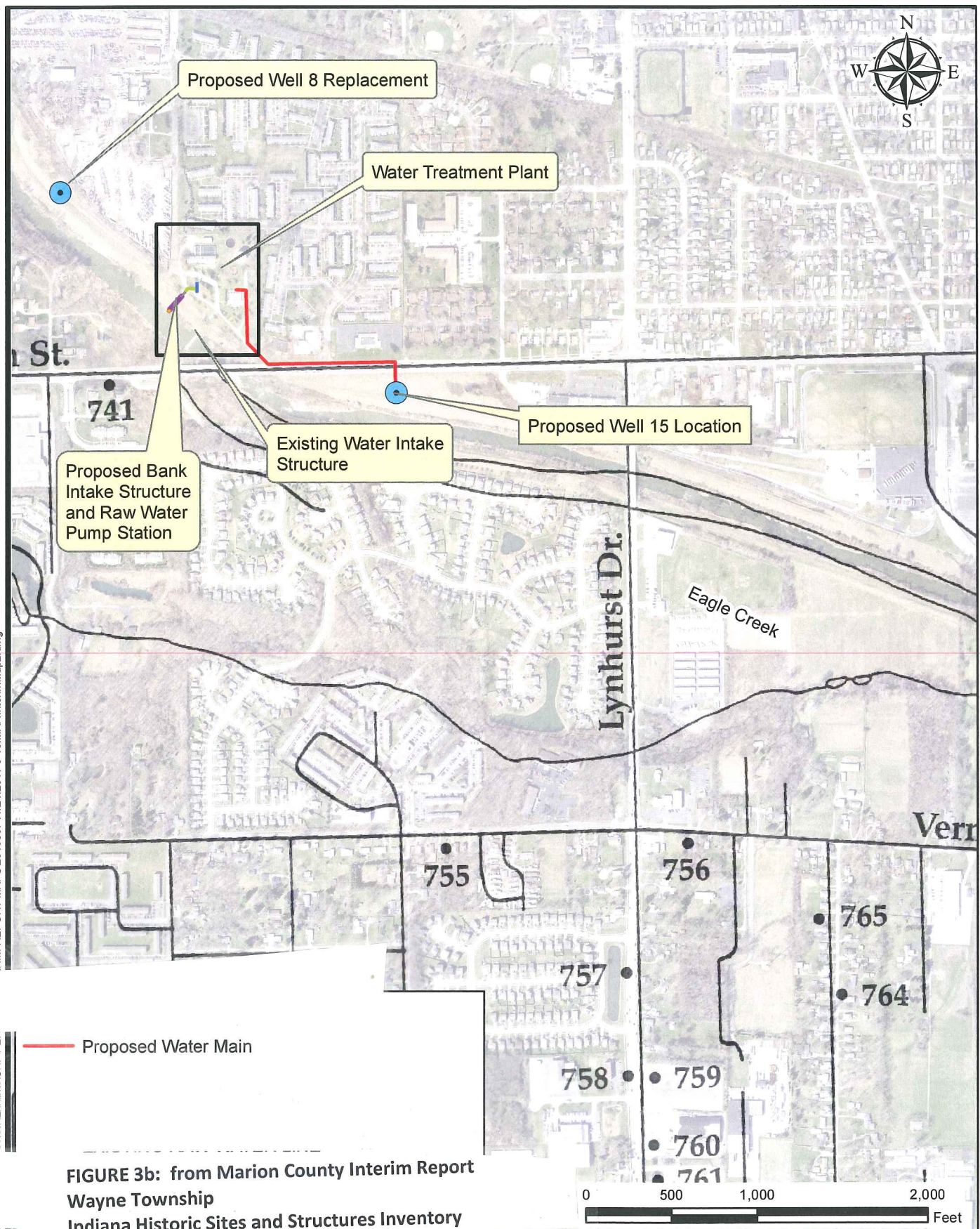
Date: 06/15/2011
Revision 4 Date: 09/27/2012



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**FIGURE 3b: from Marion County Interim Report
Wayne Township
Indiana Historic Sites and Structures Inventory**

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**Wayne Township Interim Map #16
Sites # 55736-55776**

Town of Speedway Water Works
5700 West 10th Street
Speedway, Indiana 46224

Speedway Water Works Improvements

Location: Speedway
Township: Wayne
County: Marion
State: Indiana

Date: 6/15/2011
Revision 4 Date: 09/27/2012